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photodetector sensing the input optical power of at least one of the plurality of optical signals input to the first end of said first segment of active optical fiber and outputting an electrical signal in response thereto;

a second photodetector operatively coupled to an input port of said dispersion compensating element, said second photodetector sensing an optical input power associated with the plurality of optical signals input to said dispersion compensating element and outputting a second electrical signal in response thereto;

a third photodetector operatively coupled to an output port of said dispersion compensating element, said third photodetector sensing an optical output power associated with the plurality of dispersion compensated optical signals output from said dispersion compensating element and outputting a third electrical signal in response thereto;

a memory device storing a reference span loss value indicative of a span loss associated with a preceding span to which said first segment of active optical fiber is operatively connected and a reference dispersion compensating element loss value representative of a reference power loss across said dispersion compensating element;

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a processing unit operatively coupled to said first, second and third photodetectors and to said memory device, said processing unit receiving the first, second and third electrical signals from said first, second, and third photodetectors and the reference span loss and dispersion compensating element loss values from said memory device, said processing unit outputting the attenuation control signal in response to the first electrical signal, the second electrical signal, the third electrical signal, the reference span loss value and the dispersion compensating element loss value.

## REMARKS

Claims 1-24 are pending in this application. Claims 1 and 19 are independent.

## Drawing Objection and 35 USC 112, Second Paragraph Rejection

The drawings have been objected to under 37 CFR 1.83(a) as allegedly not showing every feature of the claimed invention. In a related rejection, claims 3-5 are rejected under 35 USC 112, second paragraph as being indefinite. This drawing objection and the second paragraph rejection are respectfully traversed.

As the Examiner has recognized, the "second photodetector"